

Excimer laser resonator with high spectral purity output beam - has filter between beam widening device and exit mirror

Patent Number: DE4029687

Publication date: 1992-04-02

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Requested Patent: DE4029687

Application Number: DE 19 02 4029687 19900813

Priority Number(s): DE 199001029687 19900813

IPC Classifications: H01S3/062D2

Abstract

The laser resonator has an exit mirror (12), an angular dispersion element (14) and a device (28) for widening the laser beam incident on the latter. A filter (30) lies in the path of the beam between the beam widening device (28) and the exit mirror (12), or between the individual elements (P1, P2, P3) of the beam widening elements (28). Preferably the filter (30) is an etalon which exhibits a bandwidth which is at least double that of the resonator (10) with the beam widening device (28), but without the filter (30).
USE - E.g. in photolithography or micro-material processing.

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